

for wild onion and wild garlic (*Allium* spp.) bulblets classed as weed seeds.

(6) Dodder (*Cuscuta* spp.): Seeds devoid of embryos and seeds which are ashy gray to creamy white in color are inert matter. Seeds should be sectioned when necessary to determine if an embryo is present as when seeds have a normal color but are slightly swollen, dimpled or have minute holes.

(7) Buckhorn (*Plantago lanceolata*): Black seeds, with no brown color evident, whether shriveled or plump; the color of questionable seeds shall be determined by use of a stereoscopic microscope with magnification of approximately 10x and a fluorescent lamp with two 15-watt daylight-type tubes.

(8) Ragweed (*Ambrosia* spp.): Seed with both the involucre and pericarp absent.

(c) Other matter that is not seed:

(1) Free nematode galls or fungal bodies such as smut, ergot, and other sclerotia.

(2) Soil particles, sand, stone, chaff, stems, leaves, flowers, loose coating material, and any other foreign material.

(3) Coating material removed from coated seed by washing. Refer to § 201.51b(c).

[46 FR 53637, Oct. 29, 1981; 46 FR 58059, Nov. 30, 1981; 59 FR 64498, Dec. 14, 1994; 65 FR 1707, Jan. 11, 2000]

#### **§ 201.51a Special procedures for purity analysis.**

(a) The Uniform Blowing Procedure shall be used for the separation of pure seed and inert matter in the following: Kentucky bluegrass, Canada bluegrass, rough bluegrass, Pensacola variety of bahiagrass, orchardgrass, blue grama, and side-oats grama.

(1) When kinds listed in this section appear in mixtures they shall be separated from other kinds before using the Uniform Blowing Procedure.

(2) To determine the blowing point for these procedures, individual calibration samples for Kentucky bluegrass, orchardgrass, and Pensacola variety of bahiagrass shall be used. The calibration sample for Kentucky bluegrass shall be used for Canada bluegrass, rough bluegrass, blue grama, and side-oats grama.

(i) The blowing point for Canada bluegrass shall be the same as the blowing point determined for Kentucky bluegrass.

(ii) The blowing point for rough bluegrass shall be a factor of 0.82 (82 percent) of the blowing point determined for Kentucky bluegrass. The 0.82 factor is restricted to the General-type seed blower.

(iii) The blowing point for blue grama shall be a factor of 1.157 of the blowing point determined for Kentucky bluegrass. Before blowing, extraneous material that will interfere with the blowing process shall be removed. The sample to be blown shall be divided into four approximately equal parts and each blown separately. The 1.157 factor is restricted to the General-type seed blower.

(iv) The blowing point for side-oats grama shall be a factor of 1.480 of the blowing point determined for Kentucky bluegrass. Before blowing, extraneous material that will interfere with the blowing process shall be removed. The sample to be blown shall be divided into four approximately equal parts and each part blown separately. The 1.480 factor is restricted to the General-type seed blower.

(3) Calibration samples and instructions are available on loan through the Seed Regulatory and Testing Branch, LS, AMS, Building 306, Room 213, Beltsville, Maryland 20705.

(4) The calibration samples shall be used to establish a blowing point prior to proceeding with the separation of pure seed and inert matter for these kinds. After completing the blowing procedure, remove all weed and other crop seeds from the light portion and add these to the weed or other crop separation, as appropriate. The remainder of the light portion shall be considered inert matter. Remove all weed and other crop seeds and other inert matter (stems, leaves, dirt) from the heavy portion and add these to the weed seed, other crop seed, or inert matter separations, as appropriate. The remainder of the heavy portion shall be considered pure seed.

(5) With orchardgrass, after the blowing, proceed with the multiple unit procedure.

(b) The Multiple Unit Procedure of determining the pure seed fraction shall be used only for the kinds included in the following table when multiple units are present in a sample. These methods are applicable to the kinds listed when they occur in mixtures or singly. Any single unit without attached structures, as described below, shall be considered a single unit. Multiple units and single units for the kinds listed shall remain intact. The attached glumes and fertile or sterile florets shall not be removed from the fertile floret.

(1) A multiple unit is a seed unit that includes one or more structures as follows (the length of the awn shall be disregarded when determining the length of a fertile floret or an attached structure):

(i) An attached sterile or fertile floret that extends to or beyond the tip of a fertile floret;

(ii) A fertile floret with basally attached glume, glumes, or basally attached sterile floret of any length;

(iii) A fertile floret with two or more attached sterile and/or fertile florets of any length.

(2) Procedure for determination of multiple units:

(i) For the single kind: determine the percentage of single units present, based on the total weight of single units and multiple units. Apply the appropriate factor, as determined from the following table, to the weight of the multiple units and add that portion of the multiple unit weight to the weight of the single units. The remaining multiple unit weight shall be added to the weight of the inert matter.

(ii) For mixtures that include one or more of the kinds in the following table, determine the percentage of single units, based on the total weight of single units and multiple units, for each kind. Apply the appropriate factor as determined from the following table, to the weight of multiple units of each kind.

TABLE OF FACTORS TO APPLY TO MULTIPLE UNITS <sup>a</sup>

Percent of single units of each kind	Chewings fescue	Red fescue	Orchard-grass	Crested wheat-grass <sup>b</sup>	Pubescent wheat-grass	Intermediate wheat-grass	Tall wheat-grass <sup>c</sup>	Western wheat-grass <sup>c</sup>	Smooth brome
50 or below .....	91	80	80	70	66	72	—	—	72
50.01–55.00 .....	91	81	81	72	67	74	—	—	74
55.01–60.00 .....	91	82	81	73	67	75	—	—	75
60.01–65.00 .....	91	83	82	74	67	76	—	—	76
65.01–70.00 .....	91	84	82	75	68	77	—	60	78
70.01–75.00 .....	91	86	82	76	68	78	—	66	79
75.01–80.00 .....	91	87	83	77	69	79	50	67	81
80.01–85.00 .....	91	88	83	78	69	80	55	68	82
85.01–90.00 .....	91	89	83	79	69	81	65	70	83
90.01–100.00 .....	91	90	84	79	70	82	70	74	85

<sup>a</sup> The factors represent the percentages of the multiple unit weights which are considered pure seed. The remaining percentage is regarded as inert matter.

<sup>b</sup> Includes both standard crested wheatgrass and fairway crested wheatgrass.

<sup>c</sup> Dashes in table indicate that no factors are available at the levels shown.

[59 FR 64498, Dec. 14, 1994]

#### § 201.51b Purity procedures for coated seed.

(a) The working sample for coated seed is obtained as described in § 201.46(d) (1) and (2), and weighed in grams to four significant figures.

(b) Any loose coating material shall be sieved, weighed, and included with the inert matter component.

(c) Coating material is removed from the seed by washing with water or

other solvents such as, but not limited to, dilute sodium hydroxide (NaOH). Use of fine mesh sieves is recommended for this procedure, and stirring or shaking the coated units may be necessary to obtain de-coated seed.

(d) Spread de-coated seed on blotters or filter paper in a shallow container. Air dry overnight at room temperature.

(e) Separation of component parts:

(1) Kind or variety considered pure seed.